

REMARKS / ARGUMENTS

Claims 1-31 are pending in the instant application, of which claims 1-28 were previously presented and claims 29-31 are new claims. Claims 1, 3, 13, 16, 18-19, 23-24 and 27-28 have been amended to further clarify the language used in the claims and to further prosecution of the application. The Applicant submits that the claims 1-31 define patentable subject matter in view of the following remarks and arguments.

Claims 1-4, 15-20 and 23 are rejected under 35 USC 102(e) as anticipated by Boucher et al. (US Patent. No. 6,226,680, hereafter Boucher). Claims 5-14, 21-22 and 24-28 are rejected under 35 USC 103(a) as being unpatentable over Boucher et al. in view of (not necessarily in the same order or combination) Kistler (US Publication No. 2002/0198934, hereafter Kistler), Microsoft (Winsock Direct and Protocol Offload on SANs, 03/03/2001, hereafter Microsoft), Official Notice, Hayes et al (US Publication No. 2003/0046330, hereafter Hayes).

I. RESPONSE TO EXAMINER'S ARGUMENTS

In the Final Office Action at pages 2-5, the Examiner traverses the Applicant's argument that Boucher in Figs 13 and col. 16 lines 6-10 requires four network lines where each uses a dedicated network connector to function, in contrast to "A network connector, a processor coupled to the network connector,"

as recited in claim 1 by the Applicant. The Examiner states that "there is no need for Boucher's network interface card to have four network connectors to function. If one conduit (connector) is used alone, the connector is fully capable of communicating a plurality of network traffics as indicated in the second limitation "a processor coupled to the network connector, the processor operable to process a plurality of different types of network traffic" of claim 1.

The Applicant respectfully disagrees and points out that the Examiner has mistakenly interpreted Boucher's disclosure of protocol processing by "fast path or slow path" as different types of network, which the Applicant contends that they are not. The Applicant submits that Boucher throughout the entire disclosure, for example, in Fig. 3 (flow chart) and Fig. 9, discloses that the host evaluates an incoming packet from network line 210 in the INIC 200 (or CPD). The host evaluates the incoming packet (Fig. 3, step 59) based on a system performance benefit to the host, determines whether the message should be routed to a fast path 237 (Fig. 3, step 53) or a slow path 231 (Fig. 3, step 61).

Therefore, the Applicant submits that Boucher discloses the packet (which logically is of a single type of traffic) is routed to either a fast path 237 or a slow path 231 is based on the system's performance choice and not based on the choice of "a plurality of different types of network traffic," as recited by the Applicant in claim 1.

Accordingly, the Applicant maintains that claims 1 and 18 are not anticipated by Boucher and should be allowable. The Applicant respectfully requests that the rejection of independent claims 1 and 18 under 35 U.S.C. § 102(e) be withdrawn.

Likewise, claim 24 is not rendered obvious by the combination of Boucher and Hayes for the lack of disclosure or suggestion of the limitation of "handling a plurality of different types of network traffic via a single Ethernet connector," as recited in claim 24 by the Applicant. The Applicant respectfully requests that the rejection to claim 24 under 35 U.S.C. § 103(a) be withdrawn.

Furthermore, the Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of the independent claim 1, 18 and 24 should such a need arise.

Dependent claims 2-17, 19-23 depend directly or indirectly from respective independent claims 1 and 18, and are, consequently, also respectfully submitted to be allowable and requests that the rejection under 35 U.S.C. § 102(e) be withdrawn.

Dependent claims 25-28 depend directly or indirectly from respective independent claims 1 and 18, and are, consequently, also respectfully submitted to be allowable and requests that the rejection under 35 U.S.C. § 102(e) be withdrawn.

The Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of dependent claims 2-17, 19-23 and 25-28 should such a need arise.

II. REJECTION UNDER 35 U.S.C. § 102(e)

MPEP 2131 states:

"[a] claim is anticipated only if **each and every element** as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." See MPEP at 2131 (internal citation omitted). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." See *id.* (internal citation omitted).

A. Boucher Does Not Anticipate Claim 1-4, 15-20 and 23

The Applicant turns to the rejection of claims 1-4, 15-20 and 23 under 35 U.S.C. § 102(e) as being anticipated by Boucher. Without conceding that Boucher qualifies as prior art under 35 U.S.C. 102(e), the Applicant respectfully traverses this rejection as follows.

A(1) Independent Claims 1 and 18

With regard to the rejection of independent claim 1 under 35 U.S.C. § 102(e), the Applicant submits that Boucher does not disclose or suggest at least the limitation of "a processor coupled to the network connector, the processor

operable to process **a plurality of different types of network traffic**,” as recited in the Applicant’s claim 1.

In the Office Action, the Examiner asserts Boucher discloses the following:

“a processor coupled to the network connector (fig. 13, microprocessor 470, col. 16 line 62-col. 17 line 13), the processor being operable to process a plurality of different types of network traffic (abstract, col. 3 lines 35-67, col. 13 lines 24-35, the intelligent network interface card INIC’s processor supports an offload traffic via fast path and regular IP traffic via a slow path)”

See the Office Action in page 6. The Examiner seems to equate “an offload traffic via fast path and regular IP traffic via a slow path” to read on “a plurality of different types of network traffic,” as recited by the Applicant in claim 1. The Examiner relies for support citing the following:

“A network processor 230 determines, based on that summary and a comparison with any CCBs stored in the INIC 200, **whether to send a packet along a slow-path 231 for processing by the host**. A large majority of packets can avoid such sequential processing and have their data portions sent by DMA along a fast-path 237 directly to the data destination 222 in the server according to a matching CCB.”

See Boucher at col. 13, lines 24-30, and FIG. 9. The Applicant respectfully disagrees and points out that, contrary to the Examiner’s assertion, Boucher in FIG. 9 discloses “**whether to send a packet along a slow-path 231 for processing by the host**” indicates that the packet is directed via a fast path 237 **or** a slow path instead of “**and**,” alleged by the Examiner, uses both the fast

and the slow paths. Therefore, Boucher discloses that **a packet**, regardless of its traffic type, is routed through either a "fast path" or "slow path".

Furthermore, the Examiner is referred specifically to FIG. 3, where Boucher discloses in step 59, the packet (logically of a single type of traffic) is routed to either a fast path (step 53) or a slow path (step 61), and the routing decision is not based on the traffic type, but specifically based on a system performance choice. The Examiner is specifically referred to Boucher col. 6, lines 39-44, Boucher in Fig. 3 discloses:

"Selection 59 of fast-path candidates is based on whether the host may benefit from this message connection being handled by the CPD, which includes determining whether the packet has header bytes denoting particular protocols, such as TCP/IP or SPX/IPX for example."

See the Office Action in page 6 (with emphasis added). The Applicant points out that Boucher does not disclose packets of different types of traffic, and furthermore does not disclose routing of packets of different traffic types to fast path and slow path is based on or in response to the traffic types. Instead, Boucher clearly discloses "a packet" is received, and the selection of fast path candidates or slow path candidates is based on how the system's performance may be benefited. Boucher clearly does not disclose that selection of fast path or slow path candidates is based on the traffic types.

Accordingly, the Applicant maintains that claim 1 is not anticipated by Boucher and should be allowable. The Applicant respectfully requests that the rejection of independent claims 1 under 35 U.S.C. § 102(e) be withdrawn.

Based on at least the foregoing rationale, the Applicant believes that the independent claim 18 is in many respects, similar to independent claim 1, and should be allowable for the same rationale as in claim 1. The Applicant respectfully requests that the rejection of independent claim 18 under 35 U.S.C. § 102(e) be withdrawn.

Furthermore, the Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of the independent claims 1 and 18 should such a need arise.

A(2) Dependent Claims 2-4, 15-20 and 23

Based on at least the foregoing, the Applicant believes the rejection of the independent claims 1 and 18 under 35 U.S.C. § 102(e) as being anticipated by Boucher has been overcome and should be allowable. Claims 2-4, 15-20 and 23 depend directly or indirectly from the independent claims 1 and 18, and are, consequently, also respectfully submitted to be allowable and requests that the rejection under 35 U.S.C. § 102(e) be withdrawn.

The Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of dependent claims 2-4, 15-20 and 23 should such a need arise.

II. REJECTION UNDER 35 U.S.C. § 103

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure ("MPEP") states the following:

"First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the teaching. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure."

See MPEP at § 2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added). Further, MPEP § 2143.01 states that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination," and that "although a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a *suggestion or motivation in the reference* to do so'" (citing *In re Mills*, 916 F.2d 680, 16 USPQ 2d 1430 (Fed. Cir. 1990)). Moreover, MPEP § 2143.01 also states that the level

of ordinary skill in the art cannot be relied upon to provide the suggestion....," citing *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ 2d 1161 (Fed. Cir. 1999). Additionally, if a *prima facie* case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness.

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

A. The Proposed Combination of Boucher in view of Kistler, Microsoft, and Hayes Does Not Render Claims 5-14, 21-22 and 24-28 Unpatentable

The Applicant turns to the rejection of claims 5-14, 21-22 and 24-28 under 35 U.S.C. § 103(a) as being unpatentable over Boucher, and further in view of (not necessarily in the same order or combination) Kistler, Microsoft, and Hayes.

A(1) Dependent Claims 5-14 And 21-22

Based on at least the foregoing, the Applicant believes the rejection of the independent claims 1 and 18 under 35 U.S.C. § 102(e) as being anticipated by Boucher has been overcome and should be allowable. Claims 5-14 and 21-22 depend directly or indirectly from the independent claims 1 and 18, and are, consequently, also respectfully submitted to be allowable and requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

The Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of dependent claims 5-14 and 21-22 should such a need arise.

B The Proposed Combination of Boucher and Hayes Does Not Render Claims 24-28 Unpatentable

The Applicant turns to the rejection of claims 24-28 under 35 U.S.C. § 103(a) as being unpatentable over Boucher as applied to claim 1 above, and further in view of Hayes.

B(1) Independent Claim 24

With regard to the final rejection of independent claim 24 under 35 U.S.C. § 103(a), the Applicant submits that the combination of Boucher applied to claim 1 above, and further in view of Hayes does not disclose or suggest at least the limitation of "... a plurality of different types of network traffic ...," as recited in the Applicant's claim 18.

The Examiner states the following in the Office Action:

"Boucher does not disclose an upper layer protocol (ULP) processor; However, Hayes discloses an upper layer protocol (ULP) processor (fig. 3, [0017], NIC with an auxiliary processor for offloading iSCSI traffic)."

See the Office Action in page 13. With regard to the rejection of claim 24, the Applicant submits that claim 24 is similar in many ways to independent claim 1. The Examiner is again referred to the anticipation arguments in subsection A(1) above, in summary, that Boucher does not disclose nor suggest that the routing of incoming packet to a fast path or a slow path is based on **different types** of network traffic. Instead, Boucher discloses that the decision to route packets to a fast path or a slow path is based on performance benefit to the system, instead of different types of network traffic. The Applicant points out that Hayes alone does not overcome the deficiency in Boucher.

Accordingly, the Applicant maintains that the combination of Boucher and Hayes does not disclose or suggest "... processing the plurality of different types of network traffic via said single Ethernet connector ...," as recited in the Applicant's claim 24 and submits that claim 24 is allowable. The Applicant respectfully requests that the rejection to claim 24 under 35 U.S.C. § 103(a) be withdrawn.

Furthermore, the Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of the independent claim 24 should such a need arise.

B(2) Dependent Claims 25-28

Based on at least the foregoing, the Applicant believes the rejection of the independent claim 24 as being unpatentable over Boucher as applied to claim 1 above, and further in view of Hayes, under 35 U.S.C. § 103(a) has been overcome and should be allowable. Claims 25-28 depend from the independent claim 24, and are, consequently, also respectfully submitted to be allowable and requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

Furthermore, the Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of dependent claims 25-28 should such a need arise.

C. The Proposed Combination of Boucher and Official Notice Does Not Render Claims 21-22 Unpatentable

The Applicant turns to the rejection of dependent claims 21-22 under 35 U.S.C. § 103(a) as being unpatentable over Boucher as applied to claim 18 above, and further in view of Official Notice citing Microsoft Computer Dictionary (fifth edition). The Applicant maintains the same argument to the Official Notice as already stated in the Applicant's previous reply to the Office Action dated September 7, 2007.

In addition, the Applicant submits that claims 21-22 depend from independent claim 18 and are allowable for at least the same rationale as already

stated above with regard to claim 18. Furthermore, the Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of dependent claims 21-22 should such a need arise.

III. New Claims 29 - 31

The Applicant turns to the new claims 29 - 31. With regard to independent claim 29, the Applicant has established arguments and maintains that Boucher does not disclose or suggest that the incoming packet(s) is/are "plurality of different types of network traffic, and network services," as recited in claim 29 by the Applicant. Furthermore, Microsoft does not overcome the deficiency of limitation in Boucher. Therefore, the Applicant submits that claim 29 should be allowable over Boucher and/or Microsoft.

Dependent claim 30-31 depend from independent claims 29, and submits to be allowable for the same rationale presented in claim 29. The Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of claims 29-31 should such a need arise.

CONCLUSION

Based on at least the foregoing, the Applicant believes that all claims 1-31 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and requests that the Examiner telephone the undersigned Patent Agent at (312) 775-8093.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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/ Frankie W. Wong/
Registration No. 61,832
Patent Agent for Applicant

MCANDREWS, HELD & MALLOY, LTD.
500 WEST MADISON STREET, 34TH FLOOR
CHICAGO, ILLINOIS 60661
(312) 775-8093 (FWW)